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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/477,298

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CHRISTOPHER E. PEARCE

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EXAMINER
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BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
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2668

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/477,298	PEARCE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Steven Blount	2668	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 - 9, 11, 14, 16 - 19, 21 - 22, 26 - 29, 31, 34 - 38, 40 - 43, 46 - 58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Continuation of Disposition of Claims: Claims pending in the application are 1, 4 - 9, 11, 14, 16 - 19, 21 - 22, 26 - 29, 31, 34 - 38, 40 - 43, 46 - 58.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4 – 7, 9, 11, 14, 16 – 19, 21, 22, 26 – 29, 31, 34 – 38, and 40, 42 – 43, and 46 - 54 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,259,701 to Shur et al in view of U.S. patent 6,678,279 to Meredith et al.

With regard to claim 1, Shur et al teach a method of establishing a multicast communications session comprising sending multicast media to a group address (col 2 line 57; note also the multicast group address in col 4 lines 33 - 40, and the multicast/unicast servers 120 and 121 in figure 1) and communicating the media to a unicast device to enable a multicast communications session. It is noted that the implementation of the MUS (see col 1, line 55) is the equivalent of generating a multicast intermediary. Further, it is stated in column 1, lines 33+ that it is known in the art that unicast endpoints cannot access multicast sessions. In column 2, lines 2+, it is stated that multicast packets received on the multicast address are address translated and sent to a unicast address. One of ordinary skill in the art would find it obvious in view of the above that the unicast device is at least initially determined to be incapable of receiving multicast media streaming after a failed attempt, and would provide a service for this as is discussed in this rejection.

Shur et al do not however teach:

1) That the members at the receiving ends to be telephony devices per se, although they do teach computer terminals 110, etc. in figure 1.

2) Sorting the multicast streaming from the plurality of multicast telephony devices 103, 104, etc. into individual streams based on the telephony devices that sent them (the examiner notes that the act of "translat(ing) the Multicast address of packets received from the joined group to the Unicast address of the joining client" (col 4, lines 39+) is very close to "sorting" the multicast streaming, as is defined by applicant on pages 25 – 26 of the specification).

With respect to 1), The substitution of telephony devices for computer terminals in this example is an exchange of well known equivalents in view of the well developed state of the art of carrying voice over Internet telephony and the fact that many computers now allow for the capability of plugging in microphones (in conjunction with their speakers) to allow for conversation. Further, the examiner notes that in applicants invention (see fig 1, members 42 and 44), telephones and computers are both applied. The examiner notes that in col 4, lines 23+, the use of a "Visual conference tool" is discussed.

With respect to 2), Meredith teaches sorting the multicast data and the unicast data in a packet switch buffering system which includes sorters 108. See especially col 2 lines 63+. Also, the act of converting the data packets to a format the line card interface units can use (see col 3 lines 43+ and col 4 lines 55+) can be considered to be an act of sorting.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have sorted the multicast media streaming from the plurality of telephony devices of Shur with their own special IP addresses, in light of the teachings of Meredith et al, in order to optimize the process of sending multicasting to the unicast devices.

With regard to claim 4, since it is a "conference", Shur et al's teaching of sending multicast media to the intermediary must work in reverse, such that unicast must be able to be sent to multicast.

With regard to claim 5, associating the first logical port of the intermediary with a unicast device and modifying source address received in the received media to specify a second logical port of the intermediary associated with the multicast group address is taught in figure 1, wherein the member 120 is interfaced with members 113 and 102, and note also the address translation described in col 3 lines 33+, col 4 lines 38+, col 5 lines 9+, the mention of the unicast address on the MUS, and the discussion of UDP sockets in col 7 lines 64+ and also col 8 lines 5+.

With regard to claim 6, association of the unicast device with the intermediary comprising use of a UDP logical port is taught in col 7 lines 64+.

With regard to claim 7, modifying source and port information: see col 8 lines 5+ and note that this is well known.

With regard to claim 9, two multicast devices 103/104 are shown in figure 1.

With regard to the following claims, note the following, in addition to the preceding rejections:

Cl 11: see above, including plurality of terminals 103, 104 (fig 1), as noted above,

unicast member 113, multicast member 102, mus member 120 providing unicast to multicast communication; CI 14: see above, and note the MUS receives information from 113 and provides it to 102; CI 16: the MUS is a logical device coupled to the network which uses software to operate members such as 204 in figure 2 and also member 206 in figure 2. It is noted that the use of the MUS discussed in col 1, lines 55+ is provided in response to the fact that the unicast device cannot receive multicast media streaming.

CI 17: The abstract, line 3, states that IP is used on both multicast and unicast networks. CI 18: RTP for multicast streaming is taught in col 6, line 51; CI 19: multiple terminals are shown in figure 1 suggesting a conference, and also, a "Conference Visual Tool" is taught in col 4, line 24; CI 21: note the rejection of claim 1, and further note the plurality of terminals 111, 103, and 104, and note that there are two MUS devices (120 and 121); CI 22: both MUS devices can receive unicast information and communicate it to the multicast group address as noted above; note also that the use of the MUS discussed in col 1, lines 55+ is provided in response to the fact that the unicast device cannot receive multicast media streaming. CI 26: see the rejection of claim 16 above; CI 27: see line 3 of the abstract where IP is discussed; CI 28: See col 6 line 50 where RTP is discussed; CI 29: a Visual Conference Tool is mentioned in col 4, line 24; CI 30: as discussed with respect to claim 20, placing the unicast devices on hold is inherent to the process steps such as 506 shown in figure 5; CI 31: see the rejection of claim 1 above and, as noted above, the operation of the MUS's 201 is carried out through stored software (this applies to the rejection of claims 34 - 39 which follow); note also that the use of the MUS discussed in col 1, lines 55+ is provided in response

to the fact that the unicast device cannot receive multicast media streaming. CI 34: see the rejection of claim 31, and note that receiving unicast media and transmitting it to the multicast group address is taught in Shur et al as described with respect to claim 4; CI 35: see the rejection of claim 5 above, and note the fact that the functions of member 201 in figure 2 are carried out using software as noted above; CI 36: UDP is taught in col 4 last line and col 5, and IP is taught in the abstract, lines 3+; CI 37: changing information in the packet is taught in col 8 lines 5+; CI 38: a Visual Conference Tool is taught in col 4, lines 24+; CI 39: see the rejections above, including the use of software in the MUS, and note also figure 4, steps 407+.

CI 40: see the rejection of claim 1 above and note the plurality of multicast devices 111, 103, 104, etc, and further note that member 120 (and its constituent component 206) is essentially a "call manager" that establishes a communication session for member 102; CI 42: see the rejection of the claims noted above which discuss figure 4 and its relation to putting one of the media stations (in this case, members 103, 104, etc.) on hold; CI 43: see the rejection of claim 1 above and note member 120 receives media from multicast network 102 as shown in figure 1, and communicates it to members 111 also as shown, to enable a unicast communication device to participate in a communication with a multicast communication device; note also that the use of the MUS discussed in col 1, lines 55+ is provided in response to the fact that the unicast device cannot receive multicast media streaming. CI 46: see the interface between members 113/120 and 120/103 in figure 1 and also see the discussion of the relevant ports in col 7 lines 67+ and further note the rejection of claim



1 above, especially the pertinent portions mentioned concerning address translation: col 3 lines 33+, col 4 lines 38+, col 5 lines 9+; Cl 47: the MUS communicates the information to the unicast members 113, etc. as shown in figure 1; Cl 48: UDP ports are discussed in col 7, lines 63+; Cl 49: modification of the packets (and the headers, where it is well known that the addresses are located there) is taught, as mentioned previously, in col 8, lines 5+.

With regard to claims 50 to 54, see the address translation mentioned in col 3 lines 43+, col 4 lines 38+, and col 5 lines 9+.

3. Claim 41 is rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,259,701 to Shur et al in view of U.S. patent 6,678,279 to Meredith et al as applied above to claims 1, 4 – 7, 9, 11, 14, 16 – 19, 21, 22, 26 – 29, 31, 34 – 38, and 40, 42 – 43, and 46 - 54, and further in view of U.S. patent 5,963,547 to O'Neil et al.

With regard to this claim, Shur et al/Meredith et al teach the invention as described above, but do not teach summing the multicast information. This is taught in column 4, lines 5+ of O'Neil et al. It would have been obvious to one of ordinary skill in the art at the time of the invention to have summed the multicast information of Shur et al/Meredith et al, in light of the teachings of O'Neil et al, in order to allow the individuals to participate in the phone conference.

4. Claims 55 – 58 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,259,701 to Shur et al in view of U.S. patent 6,678,279 to Meredith et al as applied above to claims 1, 4 – 7, 9, 11, 14, 16 – 19, 21, 22, 26 – 29, 31, 34 – 38, and 40, 42 – 43, and 46 - 54, and further in view of U.S. patent 6,020,916 to Gerszberg et

al.

Shur et al/Meredith et al teach the invention as described above, but do not teach receiving the multicast media directed to the unicast telephony device when the unicast telephony device is placed on hold. This is taught in Gerszberg et al. See col 9 line 35 and col 10 line 50. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Shur et al/Meredith et al with a means to place the unicast device on hold, in light of the teachings of Gerszberg et al in order that customers using the unicast terminal may have a means to listen to music while waiting to be connected.

### **Response to Arguments**

5. As acknowledged by the applicant, Meredith teaches sorting by virtue of both priority and destination. See column 2 line 62. With respect to priority, one of ordinary skill in the art would find it obvious to associate the telephonic devices with different priorities (especially during a conference call, to which Shur appears to be essentially addressed to, though not limited specifically to an audio call) such that the calls may be sorted based on the priority (of the caller during the conference, wherein the priority can be determined by a variety of factors) prior to sending them to the unicast member.

### **Conclusion**

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


Art Unit: 2661

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 - 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB  
  
10/16/05

  
Ajit Patel  
Primary Examiner